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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
DANIEL JR, WILLIE J	

ART UNIT	PAPER NUMBER
2686	

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/975,102	ASAMI, KOUSUKE	
	Examiner	Art Unit	
	Willie J. Daniel, Jr.	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01/05/2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to applicant's RCE filed on 05 January 2005 and amendment filed on 07 October 2004. **Claims 1-17** are now pending in the present application.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05 January 2005 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi (US 6,047,195) in view of Armanto et al. (hereinafter Armanto) (US 6,094,587) and Kim et al. (hereinafter Kim) (US 6,751,446 B1).

Regarding **Claim 1**, Nakanishi discloses a portable telephone which reads on the claimed "cellular phone" for interchanging information with a base station (see col. 3, lines 26-29; Fig. 1) comprising:

a circuit board having a major surface (see col. 2, line 62 - col. 3, line 2; Fig. 1), where the portable telephone consists of numerous components (e.g., switch, speaker, CPU, amplifier, etc.) that are connected in order for the telephone to work in which the circuit board with a surface would be inherent;

a receiving speaker (20) which reads on the claimed "first speaker" mounted to the circuit board and adapted to be placed adjacent a user's ear when the user converses on the phone, the first speaker (20) selectively outputting a received speech from a calling party or a sound (see col. 3, lines 14-18,45-50; Fig. 1), wherein both conversation and acoustic sound is output via first speaker which is connected to the circuitry for communicating in which the placed adjacent a user's ear would be inherent hearing through the receiving speaker (20);

a calling sound speaker (22) which reads on the claimed "second speaker" for outputting sound, the second speaker (22) mounted to the circuit board (see col. 3, lines 45-50; col. 4, lines 28-30; Fig. 1);

a spacing separating the first and second speaker (20, 22) so that the first and second speakers (20, 22) may cooperate to implement a stereophonic effect for the sound (see col. 3, lines 45-50; col. 4, lines 28-30; Fig. 1), where the calling sound speaker generates a tone until off-hook; and

a CPU (23) which reads on the claimed "controller" comprising first and second switching, the first switching for controlling output of the received speech from the first

speaker (20), and the second switching for controlling output of sound from, said first speaker (20) and said second speaker (22) in accordance with sound setting selected beforehand (see col. 3, line 50 - col. 4, line 6; Figs. 1-2), where the CPU controls the switching of the outputs of the speakers automatically. Nakanishi fails to disclose having a memory for storing data relative to ringtone and music sound. However, the examiner maintains that a memory for storing data relative to ringtone and music sound was well known in the art, as taught by Armanto.

In the same field of endeavor, Armanto discloses a memory (14) for storing data relative to ringing tones which reads on the claimed "ringtone and music sound" (see col. 3, line 35-44; col. 9, lines 19-22,49-57; col. 15, lines 18-33; Fig. 6), where the permanent memory stores ringing tones (e.g., ringtone, music, and melody), other essential data for functioning of the mobile station, and any other data determined by the user.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Nakanishi and Armanto to have a memory for storing data relative to ringtone and music sound, in order to have in memory ringing tones to play when there is an incoming call, as taught by Armanto. The combination of Nakanishi and Armanto fails to disclose having the feature at opposing ends of the major surface. However, the examiner maintains that the feature at opposing ends of the major surface was well known in the art, as taught by Kim.

In the same field of endeavor, Kim discloses the feature at opposing ends of the major surface (see col. 4, lines 35-44; Figs. 2, 5-7), where the speakers are placed on opposite ends

(e.g., front and back sides) in which the second speaker can be placed on the front or side as well.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Nakanishi, Armanto, and Kim to have the feature at opposing ends of the major surface, in order to provide a mobile telephony station with a speaker phone function that can be selected automatically to forward sound to another speaker, as taught by Kim (see col. 1, line 60 - col. 2, line 6).

Regarding **Claim 2**, the combination of Nakanishi, Armanto, and Kim discloses every limitation claimed, as applied above (see claim 1), in addition Nakanishi further discloses a cellular phone wherein the sound setting is to cause said first speaker (20) to output a received speech or to cause said first speaker (20) to output sound (see col. 3, lines 45-50; Fig. 1).

Claims 3-5, 8, 10-12, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi (US 6,047,195) in view of Armanto et al. (hereinafter Armanto) (US 6,094,587), and Kim et al. (hereinafter Kim) (US 6,751,446 B1) as applied to claim 2 above, and further in view of well known prior art (MPEP 2144.03).

Regarding **Claim 3**, the combination of Nakanishi, Armanto, and Kim discloses every limitation claimed, as applied above (see claim 2), in addition Nakanishi further discloses a cellular phone further comprising:

a conversation/acoustic amplifier (19) connected to said first speaker (20) for amplifying a received speech and sound (see col. 3, lines 45-50; Fig. 1) respectively; and

a sound amplifier (21) connected to said second speaker (22) for amplifying sound (see Figure 1 and column 3 lines 45 –50). However, Nakanishi fails to specifically disclose two separate amplifiers connected to said first speaker. The examiner is giving Official Notice pursuant to Manual of Patent Examining and Procedure (MPEP) 2144.03 [R-1] Reliance on Common Knowledge in the Art or "Well Known" Prior Art for the following assumption: Separate audio amplifiers based on system requirements (amplification, frequency response) connected to the same output device is well known.

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time the invention was made to utilize the cellular device of the combination of Nakanishi, Armanto, Kim, and well known prior art to achieve an enhanced sound quality/amplitude by employing separate amplifiers connected to said first speaker (20).

Regarding **Claim 4**, the combination of Nakanishi, Armanto, Kim, and well known prior art discloses every limitation claimed, as applied above (see claim 3), in addition Nakanishi further discloses a cellular phone wherein when said first speaker (20) is assigned to a received speech, said controller (23) causes a call incoming signal to be input only to said sound amplifier (21) connected to said second speaker (22) (see col. 3, lines 45-50; Fig. 1).

Regarding **Claim 5**, the combination of Nakanishi, Armanto, Kim, and well known prior art discloses every limitation claimed, as applied above (see claim 3), in addition Nakanishi further discloses a cellular phone wherein during conversation said controller (23) causes a received speech signal to be input only to said conversation/acoustic amplifier (19) connected to said first speaker (20) (see col. 3, lines 45-50; Fig. 1).

Regarding **Claim 8**, the combination of Nakanishi, Armanto, and Kim discloses every limitation claimed, as applied above (see claim 3), in addition Nakanishi further discloses a first speaker (20) connected to a conversation/acoustic amplifier (19), and a second speaker (22) connected to a sound amplifier (21) (see col. 3, lines 45-50; Fig. 1), and a call incoming tone signal fed to amplifier (21). The combination of Nakanishi, Armanto, and Kim fails to specifically disclose the controller (23) causing a call incoming tone signal to also be fed to said conversation/acoustic amplifier (19) connected to said first speaker (20). The examiner is giving Official Notice pursuant to Manual of Patent Examining and Procedure (MPEP) 2144.03 [R-1] Reliance on Common Knowledge in the Art or "Well Known" Prior Art for the following assumption: All of the elements (i.e. amplifiers, speakers) are present in the Nakanishi disclosure to implement a call incoming tone signal to be fed to said conversation/acoustic amplifier (19) connected to said first speaker (20).

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time the invention was made to utilize the cellular device of the combination of Nakanishi, Armanto, Kim, and well known prior art to achieve an enhanced sound quality/emphasis of the call incoming tone signal, by feeding the call incoming tone signal to said conversation/acoustic amplifier (19) connected to said first speaker (20) and said sound amplifier (21) connected to said second speaker (22).

Regarding **Claim 10**, the combination of Nakanishi, Armanto, Kim, and well known prior art discloses every limitation claimed as applied above (see **claims 1** and **claim 3**), in which the claim is rejected.

Regarding **Claim 11**, the combination of Nakanishi, Armanto, Kim, and well known prior art discloses every limitation claimed as applied above (see **claims 10** and **claim 4**), in which the claim is rejected.

Regarding **Claim 12**, the combination of Nakanishi, Armanto, Kim, and well known prior art discloses every limitation claimed as applied above (see **claims 11** and **claim 5**), in which the claim is rejected.

Regarding **Claim 15**, the combination of Nakanishi, Armanto, Kim, and well known prior art discloses every limitation claimed as applied above (see **claims 10** and **claim 8**), in which the claim is rejected.

Claims 9, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi (US 6,047,195) in view of Armanto et al. (hereinafter Armanto) (US 6,094,587), Kim et al. (hereinafter Kim) (US 6,751,446 B1), and well known prior art (MPEP 2144.03) as applied to claim 8 above, and further in view of Corkum (US 6,134,455).

Regarding **Claim 9**, the combination of Nakanishi, Armanto, Kim, and well known prior art discloses every limitation claimed, as applied above (see claim 8), in addition Nakanishi further discloses having a controller (23) (see col. 3, line 55 - col. 4, line 6), where the controller controls the volume of sound automatically with the calling speaker (20) and the receiving speaker (22). However, the combination of Nakanishi, Armanto, Kim, and well known prior art fails to specify wherein said controller causes a volume of the call incoming signal output from said first speaker to increase stepwise. However, the examiner maintains

that wherein said controller causes a volume of the call incoming signal output from said first speaker to increase stepwise was well known in the art, as taught by Corkum.

In the same field of endeavor, Corkum discloses wherein said determiner (58) which reads on the claimed "controller" causes a volume of the call incoming signal output from said first speaker to increase stepwise (see col. 6, lines 10-15; Fig. 2), where "In another implementation, a plurality of different ringing level amplitudes are selectably formed responsive to determinations made by the determiner. Such plurality of ringing levels form, for instance, a step function, or increase in direct proportion to the determination made by the determiner (58)."

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time the invention was made to combine Nakanishi, Armanto, Kim, well known prior art, and Corkum to have wherein said controller causes a volume of the call incoming signal output from said first speaker to increase stepwise, for the purpose of gradually adjusting the audio volume to avoid startling the user.

Regarding **Claim 16**, the combination of Nakanishi, Armanto, Kim, well known prior art, and Corkum discloses every limitation claimed as applied above (see **claims 15** and **9**), in which the claim is rejected.

Claims 6, 7, 13, 14, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi (US 6,047,195) in view of Armanto et al. (hereinafter Armanto) (US 6,094,587), Kim et al. (hereinafter Kim) (US 6,751,446 B1), and well known prior art (MPEP 2144.03)

as applied to claim 5 above, and further in view of Barber et al. (hereinafter Barber) (US 5,471,518).

Regarding **Claim 6**, the combination of Nakanishi, Armanto, Kim, and well known prior art discloses every limitation claimed as applied above (see **claim 5**), in addition Nakanishi further discloses of wherein said controller (23) causes, when said signal sound which reads on the claimed "speech data" should be reproduced, a sound which reads on the claimed "speech signal" to be input to said sound amplifier (19) connected to said first speaker (20) and said sound amplifier (21) connected to said second speaker (22) (see col. 3, line 55 - col. 4, line 6; Fig. 2) and Armanto further discloses a mobile station (1) which reads on the claimed phone having a memory (14) (see col. 9, lines 49-57), where the memory is capable of storing ringing tones, other essential data for functioning of the phone, and any other data determined by the user. The combination of Nakanishi, Armanto, Kim, and well known prior art fails to specify a speech memory for storing speech data. However, the examiner maintains that the ability to store speech data was well known in the art, as taught by Barber.

In the same field of endeavor, Barber discloses a RAM memory (20) which reads on the claimed "speech memory" for storing audio information which reads on the claimed "speech data" (see col. 3, line 54 - col. 4, line 7; Fig. 1), where RAM stores the audio information which are samples of the incoming data in which the wireless communication device with internal memory (20, 36) elements connected through data and control busses to a controller/CPU (18) and the audio deck (26).

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Nakanishi, Armanto, Kim, well known prior art, and Barber to have a speech memory for storing speech data, in order to allow for the storage of speech data, and to subsequently to play it over the provided audio outputs (20, 22), as taught by Barber.

Regarding **Claim 7**, the combination of Nakanishi, Armanto, Kim, and well known prior art discloses every limitation claimed, as applied above (see claim 6), in addition Nakanishi further discloses a signal processor (made up of a modem (15), a frame processor (16), and codec (17)) for executing preselected processing with a signal received via an antenna (1) and radio section (made up of a switch (2), filters (3, 8), amplifiers (4, 9), mixers (5, 7), and a synthesizer (14)) (see Figure 1). The combination of Nakanishi, Armanto, Kim, and well known prior art fails to specify reading data out of memory to generate a signal corresponding to said data, and a digital-to-analog converter for digitizing an output signal of said signal processor and delivering a resulting digital signal to said controller. However, the examiner maintains reading data out of memory to generate a signal corresponding to said data, and a digital-to-analog converter for digitizing an output signal of said signal processor and delivering a resulting digital signal to said controller was well known in the art, as taught by Barber.

Barber further discloses reading data out of memory to generate a signal corresponding to said data, and a digital-to-analog converter (DAC) for digitizing an output signal of said signal processor and delivering a resulting digital signal to said central processing unit (18) which reads on the claimed "controller" (see col. 3, line 54 - col. 4, line

7; Fig. 1), where a wireless communication device with internal memory (20, 36) elements and a DAC within the audio deck (26).

Therefore, it would have been obvious, to one of ordinary skill in the art, at the time the invention was made to combine the teachings of Nakanishi, Armanto, Kim, well known prior art, and Barber to have reading data out of memory to generate a signal corresponding to said data, and a digital-to-analog converter for digitizing an output signal of said signal processor and delivering a resulting digital signal to said controller, in order to allow for the storage of speech data, and to subsequently to play it over the provided audio outputs (20, 22), as taught by Barber.

Regarding **Claim 13**, the claim is rejected for the same reasons as set forth above in **claim 6**.

Regarding **Claim 14**, the claim is rejected for the same reasons as set forth above in **claim 13 and claim 7**.

Regarding **Claim 17**, the claim is rejected for the same reasons as set forth above in **claim 14**.

Response to Arguments

4. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Willie J. Daniel, Jr. whose telephone number is (703) 305-8636. The examiner can normally be reached on 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marsha D Banks-Harold

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WJD,JR
18 February 2005